AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-17 (canceled).

18. (New) A method for detecting a phase of a four-stroke gasoline engine, comprising:

in a starting phase, turning a crankshaft together with at least one piston;

triggering an ignition via an ignition coil without supply of fuel at at least two successive top dead centers of the piston;

measuring one of: i) a primary current or a primary voltage of a primary circuit, or ii) a secondary current or a secondary voltage of a secondary circuit, in a measuring period which extends at least over a spark duration after the ignition;

comparing measurements of successive top dead centers; and

determining, based on the comparison, which of the top dead centers is an ignition top dead center between a compression stroke and a power stroke, and which is a charge cycle top dead center between an exhaust stroke and an intake stroke.

19. (New) The method as recited in claim 18, wherein the measurement identifying a shorter spark duration is assigned to the ignition top dead center.

20. (New) The method as recited in claim 18, wherein the spark duration is identified as a time period after the ignition in which one of:

a primary voltage measured value or a secondary voltage measured value, or ii) a primary current measured value or a secondary current measured value exceeds a reference value.

21. (New) The method as recited in claim 18, further comprising:

within the measuring period, comparing a primary voltage across a primary winding of the ignition coil or a primary reference voltage formed from the primary voltage via a voltage divider circuit with a first reference voltage; and

outputting a spark duration signal as a function of the comparison.

22. (New) The method as recited in claim 21, wherein a first reference voltage is between voltage values of the primary reference voltage during the spark duration of a charge cycle top dead center and a static voltage after the spark duration.

23. (New) The method as recited in claim 18, wherein the secondary current is determined by measuring a secondary voltage drop across a shunt resistor which is connected in series to a secondary winding and a spark plug.

24. (New) The method as recited in claim 23, further comprising:

comparing the secondary voltages measured at the top dead centers with a second reference voltage; and

outputting a spark duration signal as a function of the comparison.

25. (New) The method as recited in claim 18, further comprising:

outputting a spark duration signal as a function of the measurement and a control signal of an ignition transistor.

26. (New) The method as recited in claim 18, further comprising:

determining the phase of a gasoline direct injection engine.

27. (New) The method as recited in claim 18, further comprising:

determining the ignition top dead center in multiple cylinders.

28. (New) A method for igniting a four-stroke gasoline direct injection engine comprising:

determining a phase of the engine and of a crankshaft rotation using a method including the following steps:

in a starting phase, turning a crankshaft together with at least one piston,

triggering an ignition via an ignition coil without supply of fuel at at least two successive top dead centers of the piston,

measuring one of: i) a primary current or a primary voltage of a primary circuit, or ii) a secondary current or a secondary voltage of a secondary circuit, in a measuring period which extends at least over a spark duration after the ignition,

comparing measurements of successive top dead centers, and

determining, based on the comparison, which of the top dead centers is an ignition top dead center between a compression stroke and a power stroke, and which is a charge cycle top dead center between an exhaust stroke and an intake stroke; and

after determining the phase, injecting and igniting according to the phase without interruption of the crankshaft rotation.

29. (New) A device for detecting a phase of a four-stroke gasoline engine, the engine including a primary circuit, a secondary circuit, an ignition coil, a spark plug, and an ignition transistor, the device comprising:

a measuring device configured to measure one of: i) primary voltage or a secondary voltage, or ii) a primary current or a secondary current, during a crankshaft rotation at times of successive top dead centers of a piston without a supply of fuel in a measuring period which extends at least over a spark duration after an ignition, and configured to output a measuring signal; and

an analyzing device configured to pick up the measuring signal of the measuring device and output a signal which indicates which of the successive top dead centers is an ignition top dead center between a compression stroke and a power stroke and which is a charge cycle top dead center between an exhaust stroke and an intake stroke.

30. (New) The device as recited in claim 29, wherein the measuring device is a primary voltage measuring device for measuring a primary voltage induced by the secondary current.

31. (New) The device as recited in claim 29, wherein the measuring device has a comparator whose inputs are connected to primary winding terminals of the ignition coil via a voltage-setting device.

32. (New) The device as recited in claim 31, wherein the comparator is an operation amplifier.

33. (New) The device as recited in claim 31, wherein the voltage setting device includes a reference voltage circuit and a voltage divoder circuit.

34. (New) The device as recited in claim 29, wherein the measuring device is a secondary current measuring device which has a resistor which, in a secondary circuit, is connected in series with a secondary winding of the ignition coil and the spark plug, the analyzing device picking up a secondary voltage drop across the resistor, as the measuring signal.

35. (New) The device as recited in claim 31, wherein the analyzing device picks up the measuring signal of the measuring device and a control signal of the ignition transistor and, as a function thereof, outputs a spark duration signal to the comparator.

36. (New) The device as recited in claim 35, wherein the comparator has a memory element for intermediate storage of at least one spark duration signal of one measurement for comparison with the spark duration signal of a subsequent measurement.